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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/777,958	12/24/96	HAMILTON D	02103/211002

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EXAMINER	
LEE, P	
ART UNIT	**PAPER NUMBER**
2743	7

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/777,958	Applicant(s) Hamilton et al
	Examiner Ping Lee	Group Art Unit 2743

☒ Responsive to communication(s) filed on *Feb 27, 1998* .

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *three* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-10* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-10* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newcomb.

Regarding claims 1-4, and 9, Newcomb discloses an audio speaker system for a vehicle in a magazine article. The woofer, mounted in an enclosure, is placed in the trunk, clear of the rear deck, as shown. However, Newcomb fails to explicitly show that the woofer is outside the spare tire compartment. It was well known in the art that the location of the woofer is generally not strictly limited to a specific location for a high fidelity stereo sound system because the low

frequency sound signal produced by the woofer does not carry the spatial information as required for portraying the stereophonic sound image. Therefore, the woofer can be placed almost any where around the listener within a reasonable distance. Newcomb shows the woofer inside the spare tire compartment. However, as discussed above, one would have expected that the woofer can be placed any where, including the rear trunk corner at the rear of the vehicle, inside the trunk because altering the location of the woofer inside the trunk does not produce any acoustically different sound effect. It would seem to be reasonable for one skill in the art to place the woofer outside the spare tire compartment, such as at the rear trunk corner, if one wants to keep the spare tire inside that compartment. It would also be a common sense to not place the woofer in the center of the trunk (for example, right above the spare tire compartment), so one can put luggage, shopping bags or other articles inside the trunk. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system as taught in Newcomb by placing the woofer inside the trunk clear of the rear deck, outside the spare tire compartment and at the rear trunk corner, since it has been held to be within the general skill of a worker in the art to rearrange the location of the woofer as a matter of design choice. In re Japikse, 86 USPQ 70.

Regarding claims 5 and 10, with the woofer mounted inside the trunk as taught in Newcomb, not conventionally mounted at the rear deck, the claimed frequency responses are inherent met.

Regarding claim 6, Newcomb shows that the rear deck is free of speaker holes.

Regarding claims 7 and 8, as discussed above and repeated here, it would have been obvious for the designer to mount the woofer any where inside the trunk, including at a rear trunk corner at the rear of the vehicle altering the location of the woofer inside the trunk does not produce any acoustically different sound effect altering the location of the woofer inside the trunk does not produce any acoustically different sound effect. The limitation that mounting woofer in a rearward section of the trunk occupying negligible useful trunk volume to cause a smaller decrease in calculated trunk volume than would occur with the woofer mounted in the rear deck is inherently met.

Response to Arguments

3. Applicant's arguments filed 2/27/98 have been fully considered but they are not persuasive.

3.1 Applicant argued that the examiner's conclusion of obviousness is based upon improper hindsight reasoning.

It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

3.2 Applicant argued that there is no suggestion to modify the references.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the reference isself or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as discussed in the previous office action, the motivation for not storing the woofer insider the spare tire compartment in Newcomb is to keep the spare tire inside that compartment for emergency situation, especially on a long trip. Furthermore, the reason behind storing the woofer at the rear trunk corner is that it was a common sense to not place the woofer in the center of the trunk (for example, right above the spare tire compartment), so one can put luggage, shopping bags or other articles inside the trunk. The key for being able to relocating the woofer to any where inside the trunk is that the low frequency sound signal produced by a woofer does not carry the spatial information as required for portraying the stereophonic sound image. Therefore, the designer has a great flexibility for determining the optimize location for storing the woofer while providing sufficient storage space inside the trunk. Since the woofer can be located almost anywhere inside the trunk, the designer can go through trial test to determine at what location that the woofer can be placed in the trunk while there is a sufficient amount of storage space left. Therefore, modifying Newcomb would have been obvious to one of ordinary skill in the art as previously set forth in the last office action.

3.3 Applicant argued that it is inapposite to rely on In re Japiksen.

The examiner is confused about In re Japiksen. It appears that applicant implies In re Japikse based on the previous office action. However, the differences between the reference and the invention are such that the subject matter as a whole (see the motivations discussed above and in the previous office action), embracing not only structure, but also advantages achieved, would have been obvious to a person of ordinary skill in the art at the time of the invention was made from the prior art being relied upon.

3.4 Applicant argued that Newcomb fails to mention the frequency response of the front seat and the rear seat as recited in claim 5.

Although Newcomb fails to explicitly show the frequency response, there is a frequency response. With the woofer mounted inside the trunk as taught in Newcomb, not conventionally mounted at the rear deck, the claimed frequency responses are inherent met.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. **Any response to this final action should be mailed to:**

Box AF
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications; please mark "EXPEDITED PROCEDURE")

Or:

(703) 305-9508 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping W. Lee whose telephone number is (703) 305-4865.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

CURTIS A. KUNTZ
SUPERVISORY PATENT EXAMINER
GROUP 2700

pwl
May 4, 1998